

# PARTS & SERVICE NEWS

REF NO. BA03014

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**SUBJECT:** INSTALLATION OF KOMATSU AIR CLEANER

**PURPOSE:** To improve reliability of air filter system.

**APPLICATION:** WA500-3L Wheel Loader Serial Number A70001 and up.

**FAILURE CODE:** 0212HB

**DESCRIPTION:** Some customers have experienced premature failures of the air cleaner on the WA500-3L. The Komatsu air cleaner will be installed in an attempt to prevent these failures.

<https://hespareparts.com/>

**PARTS LIST**

These parts are required for air cleaner installation.

Qty.	Part Number	Part Description	Additional Remarks
1	6217-81-7202	Air cleaner assembly	
1	425-01-A2360	Bracket	Replaces current air cleaner bracket.
2	6151-11-9970	Band	
2	6691-21-6550	Plate, slotted	
2	6691-21-6560	Plate, tapped	
2	6643-11-4641	Bolt	
1	600-181-3960	Cap	
1	425-01-23410	Bracket	
4	01010-81225	Bolts	
4	124-54-26540	Washer	
1	600-181-0680	Hose	
2	07281-02169	Clamp	
1	425-54-A2321	Cover, hood	
1	07046-23516	Plug	For plugging aspirator tube

Parts to be reused:

1	425-01-A2340	Tube	To be reworked
1	108575	Clamp	

## PREPARATIONS

The air cleaner replacement procedure was implemented by Komatsu due to failures on WA500-3L wheel loaders equipped with the Cummins N14 engine.

- Park the machine on a flat level surface; lower the work equipment to the ground. Shut off the engine and cycle the controls to remove any residual hydraulic pressure from the work equipment circuits.
- Apply the parking brake, block the wheels and install the safety lock bar.
- Remove the key from the ignition switch until the repairs are complete. Place a tag on the steering controls advising: **“This machine is being repaired. It should not be started or moved for any reason until the tag is removed by the person doing the repairs.”**

### WARNING

Observe all safety and precautionary standards as dictated by the environment and work conditions under which the equipment will be inspected, reworked and repaired. Consult the “shop manual”, “operator’s and maintenance manual” and your “Komatsu District Service Manager” with any and all questions regarding safety.

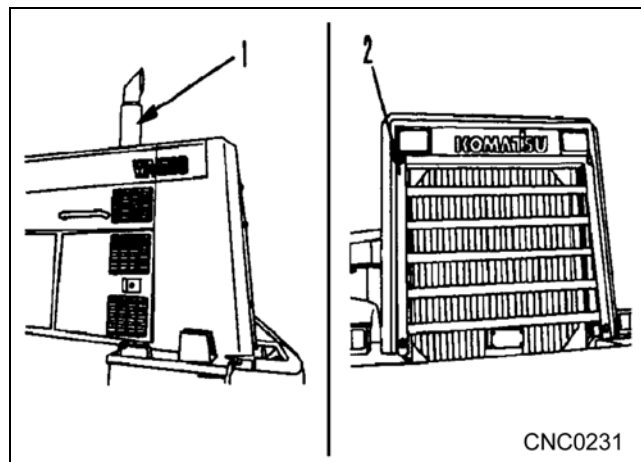
#### Remark

*These instructions are intended to supplement the service data contained in the appropriate “Shop Manual”. Always refer to that manual for Removal, Installation, Disassembly and Reassembly instructions when not contained in this document.*

## ENGINE HOOD AND AIR CLEANER REMOVAL

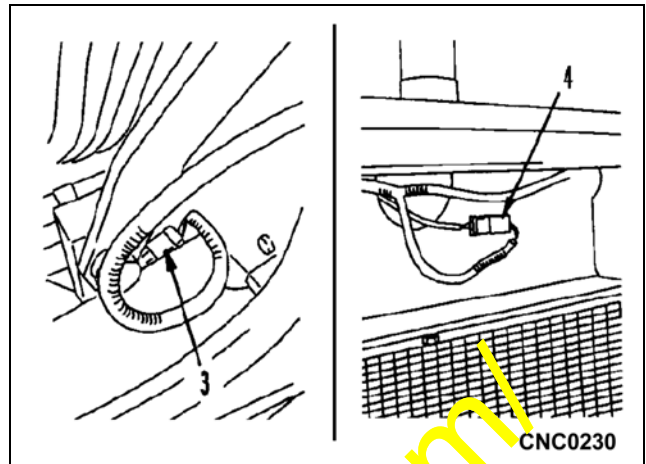
Before the new air cleaner can be installed the hood assembly must be removed for rework modifications. Park the machine on a level surface with access to an over-head crane in order to perform this operation.

1. Remove exhaust stack (1).
2. Remove the radiator grill (2) and all baffle plates.

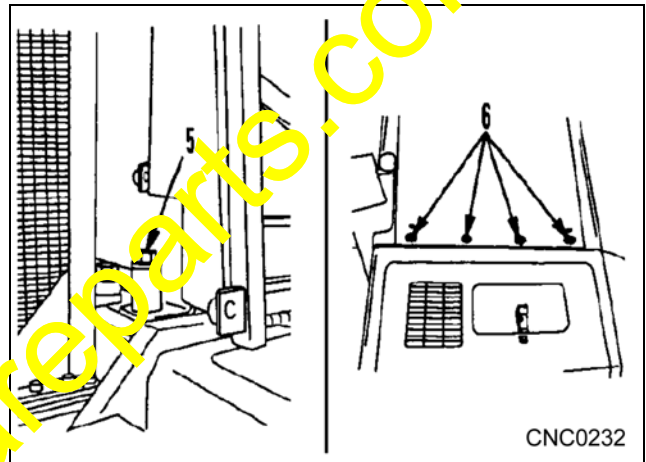


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3. Disconnect head lamps connectors (3).
4. Disconnect coolant level sensor (4).



5. Remove the six rear mounting bolts (5) and the four front mounting bolts (6).
6. Remove radiator support brackets (7).

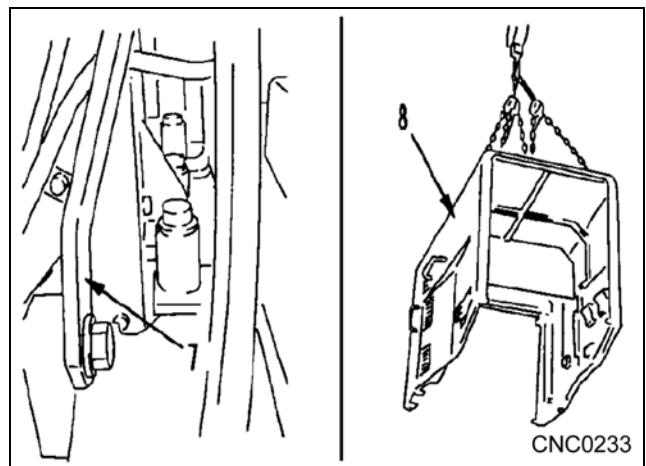


7. Remove the three air conditioning hose retaining brackets and secure hoses out of the way from the hood. Carefully lift off the engine hood assembly (8).

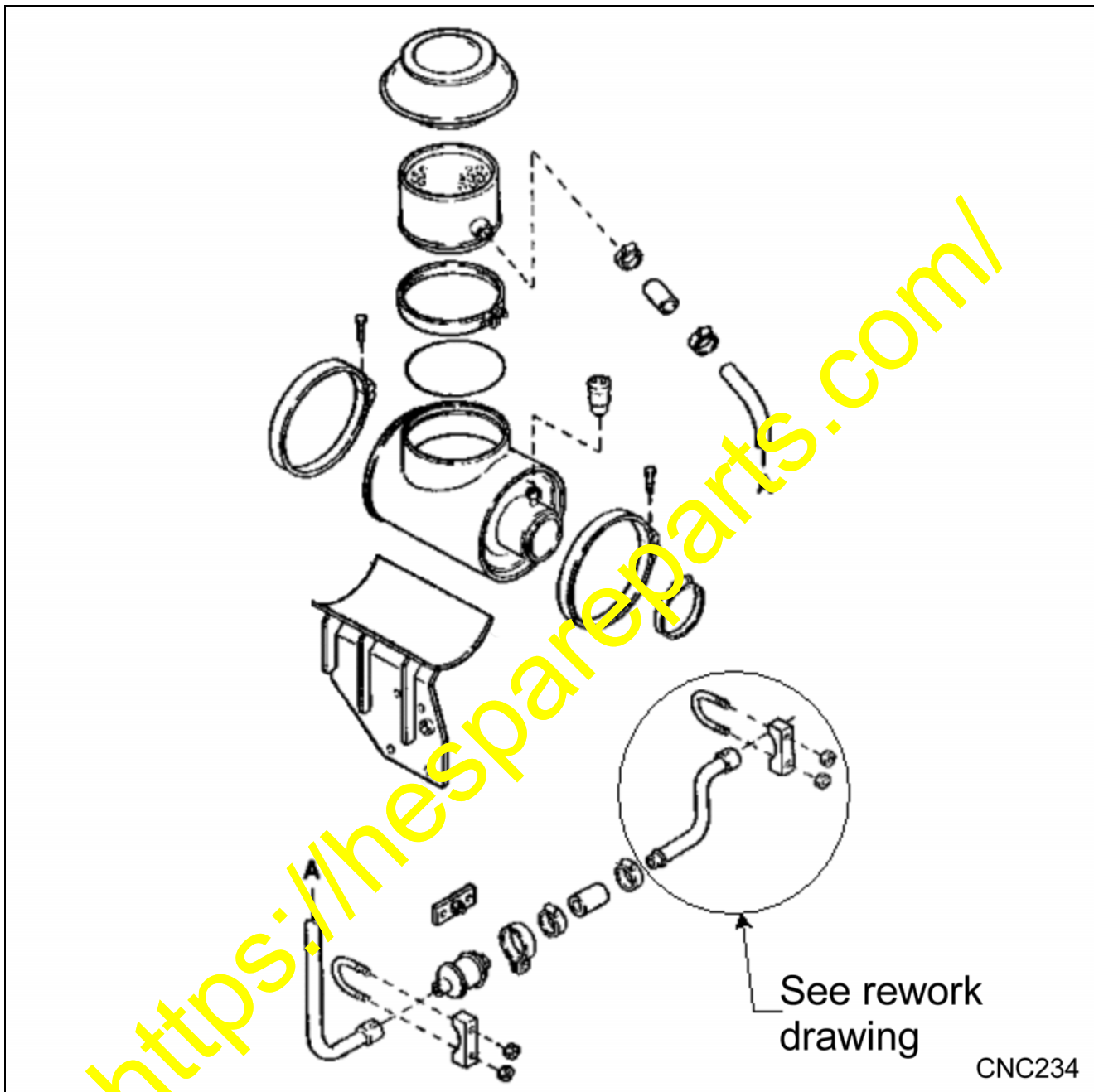


Engine hood assy: 470 kg (1034 lbs)

8. Set hood assembly in a safe area for the reworking procedures later.



9. Remove the complete Donaldson air cleaner assembly, aspirator system and mounting brackets shown in the illustration below.



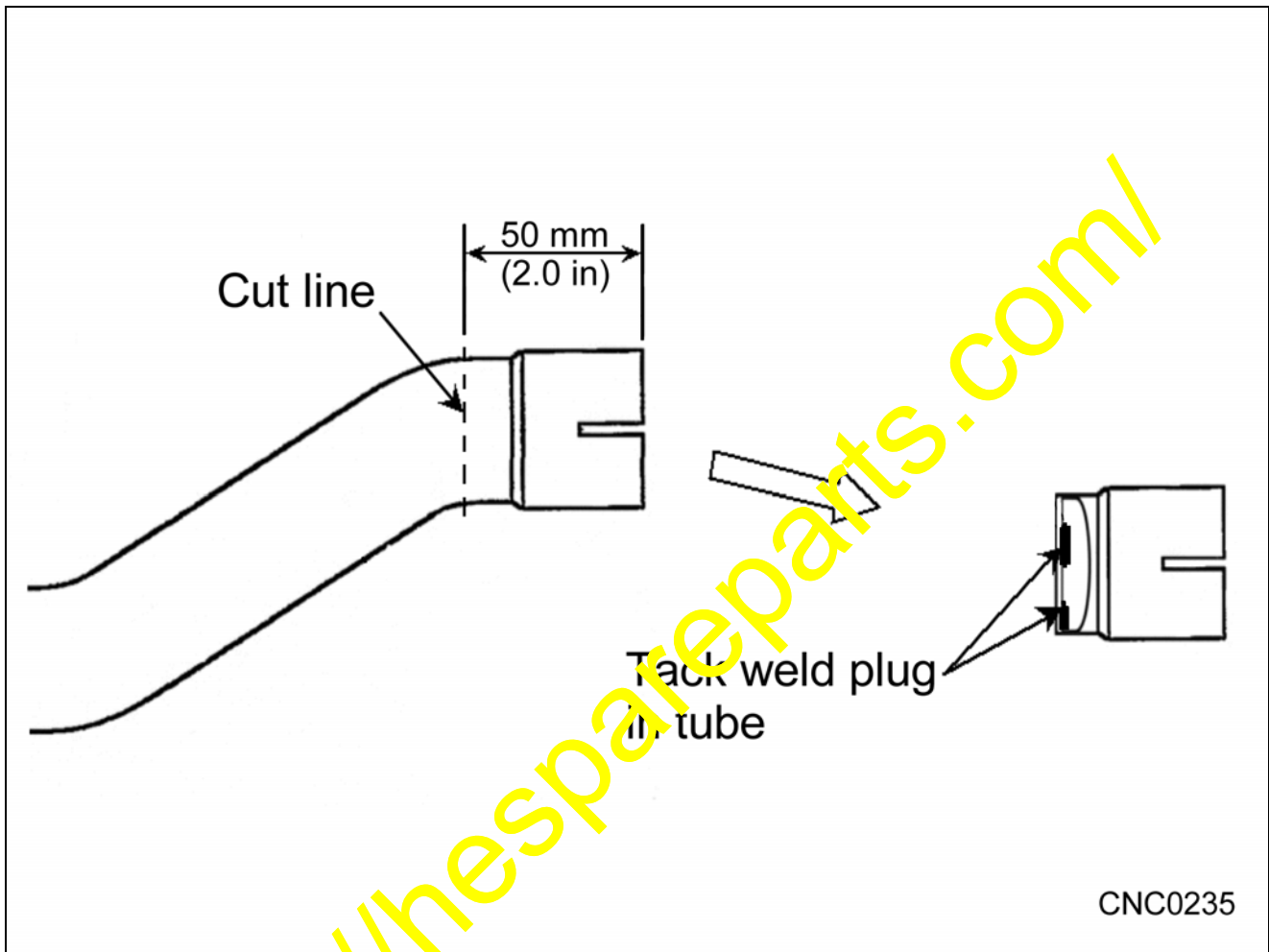
10. Discard air cleaner assembly, aspirator system, straps and mounting bracket. Retain muffler aspirator tube section for rework procedure.

**Remark**

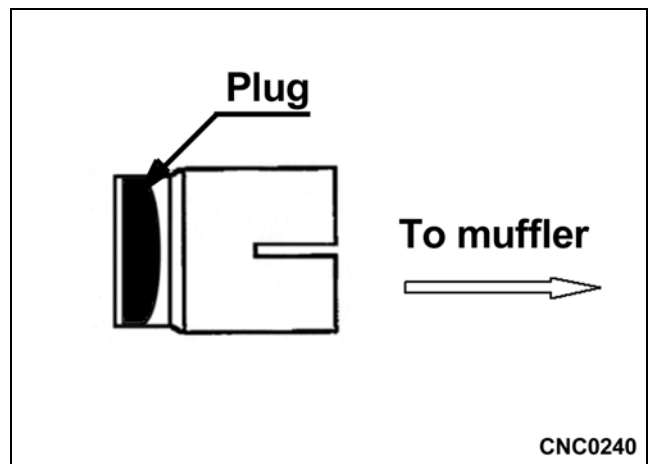
*Do not discard the hardware used to retain the air cleaner bracket to the engine, this hardware will be reused on the new air cleaner installation.*

## REWORK AND INSTALLATION OF NEW AIR CLEANER

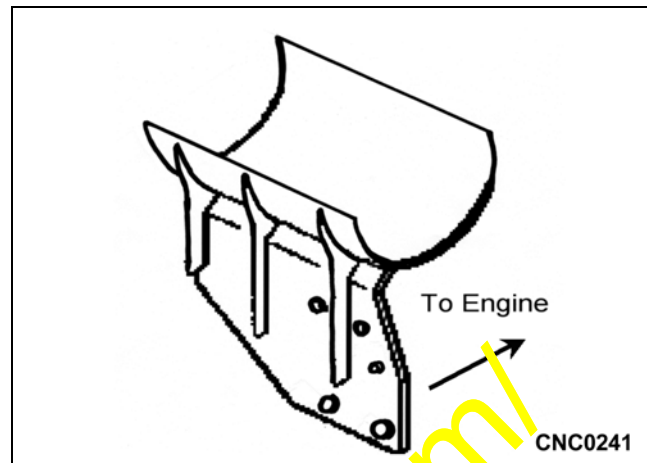
11. The new style air cleaner is not equipped with an aspirator system. Tube 425-01-A2340 must be removed and a plug 07046-23416 must be tack welded in place, as shown in the illustration.



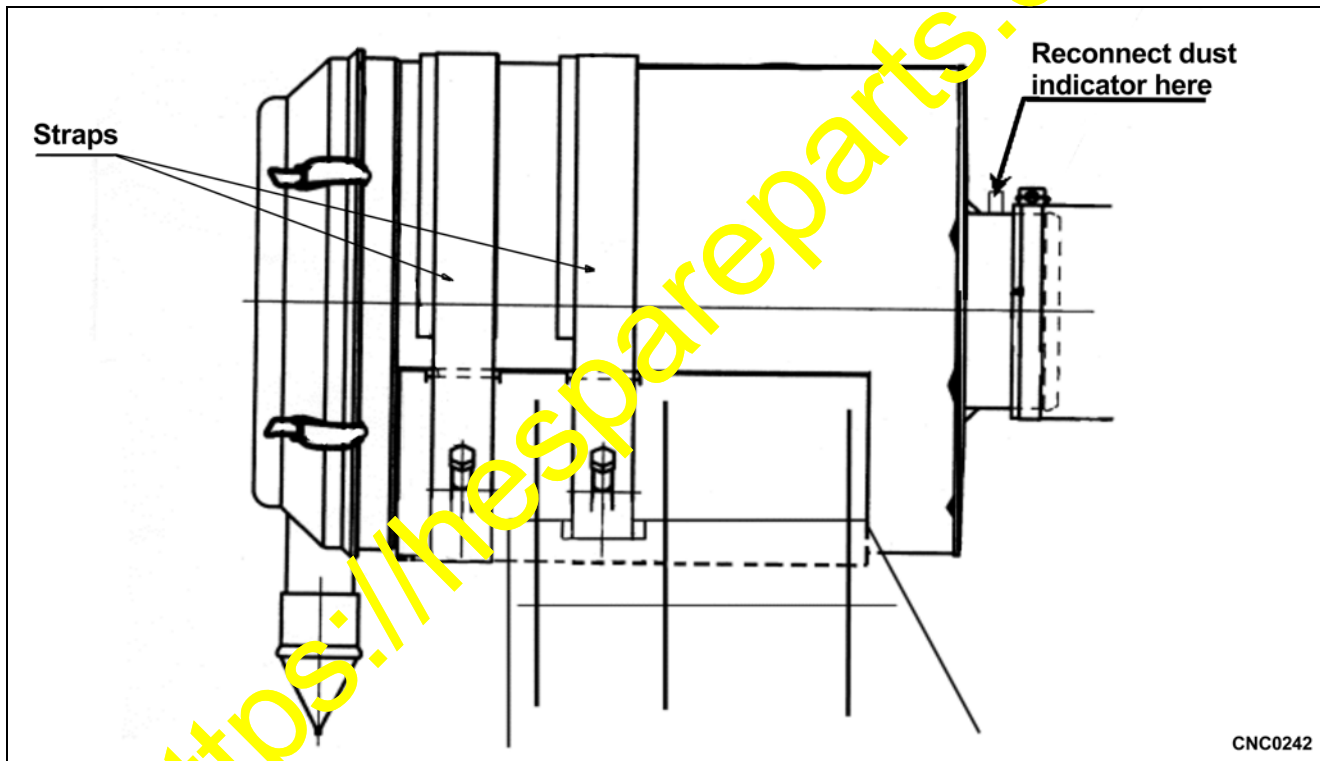
12. Once the plug is welded in place, reinstall modified tube flange section back on muffler to block aspirator port, and clamp in place.




13. Once aspirator modifications are complete, install the new air cleaner mounting bracket to the engine using the old hardware.



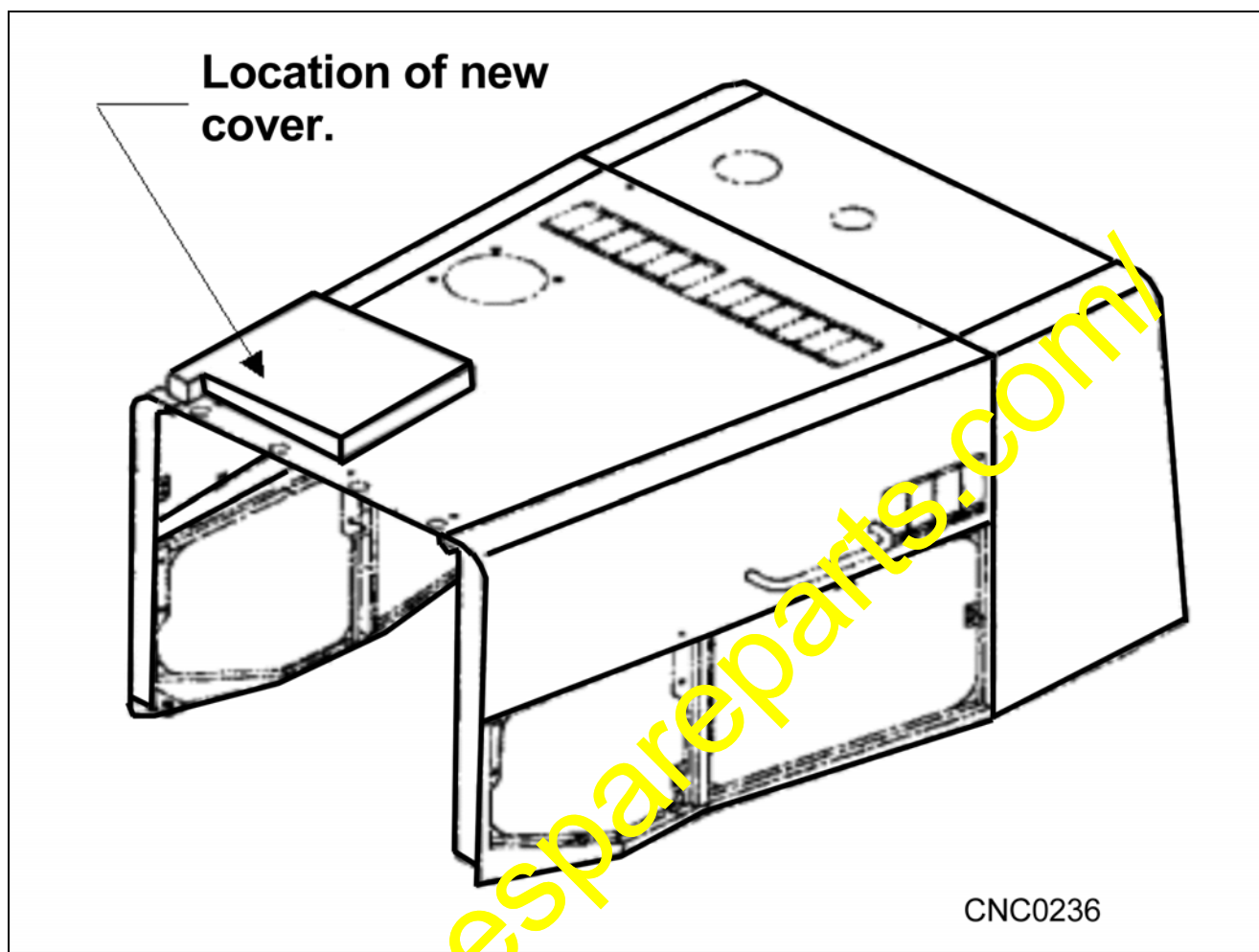
14. Install the new Komatsu air cleaner in place as shown in the illustration below.



15. Install the new retaining straps to hold the new air cleaner in place. reconnect outlet hose, position air cleaner inlet in the upward position and level with hood mounting. Torque straps to the proper specifications.

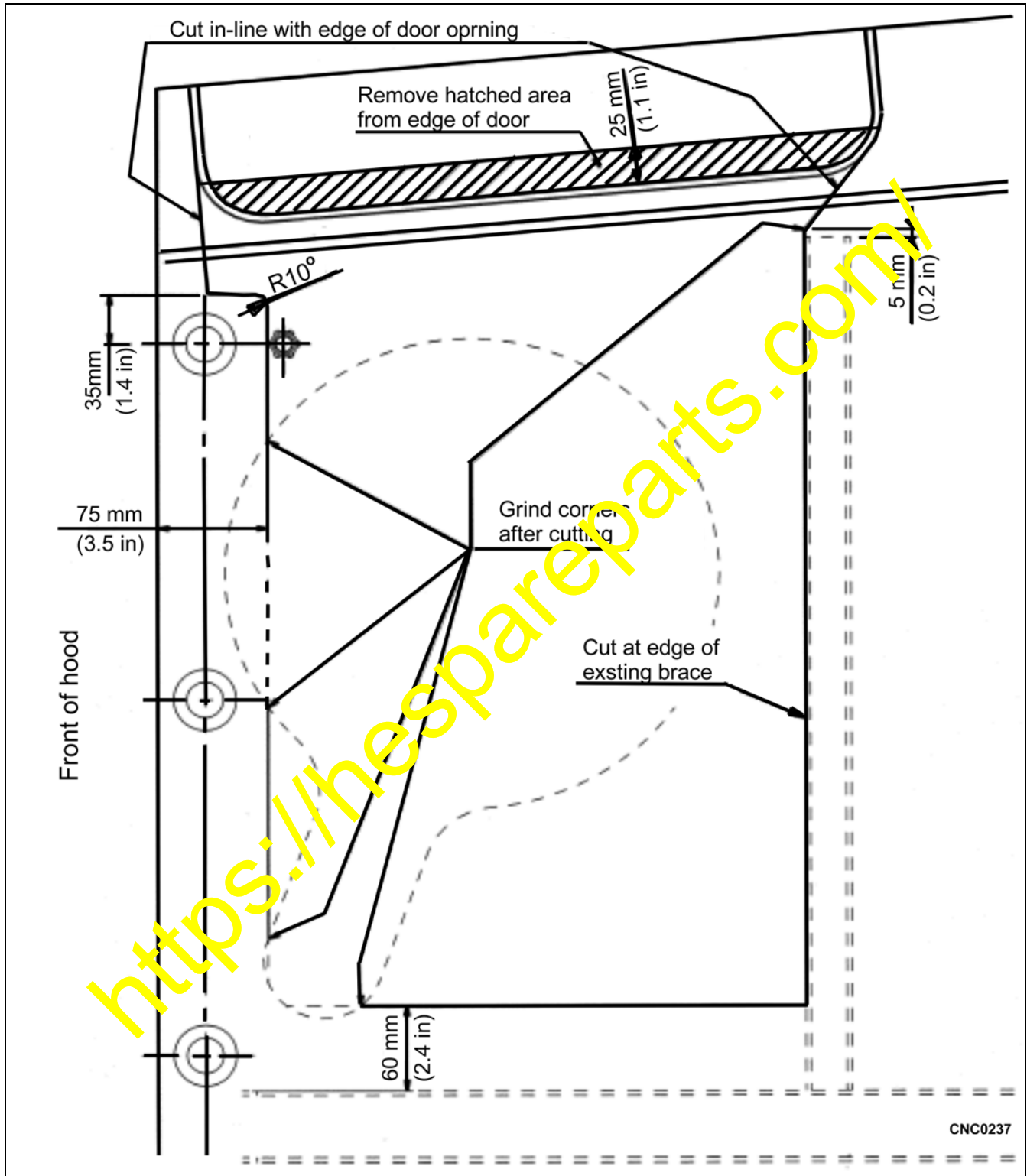
 Air cleaner straps: 11 Nm (97 in/lbs)

16. In order to accommodate the new Komatsu air cleaner unit size, the rear section of the hood must be reworked to allow for the proper clearances.

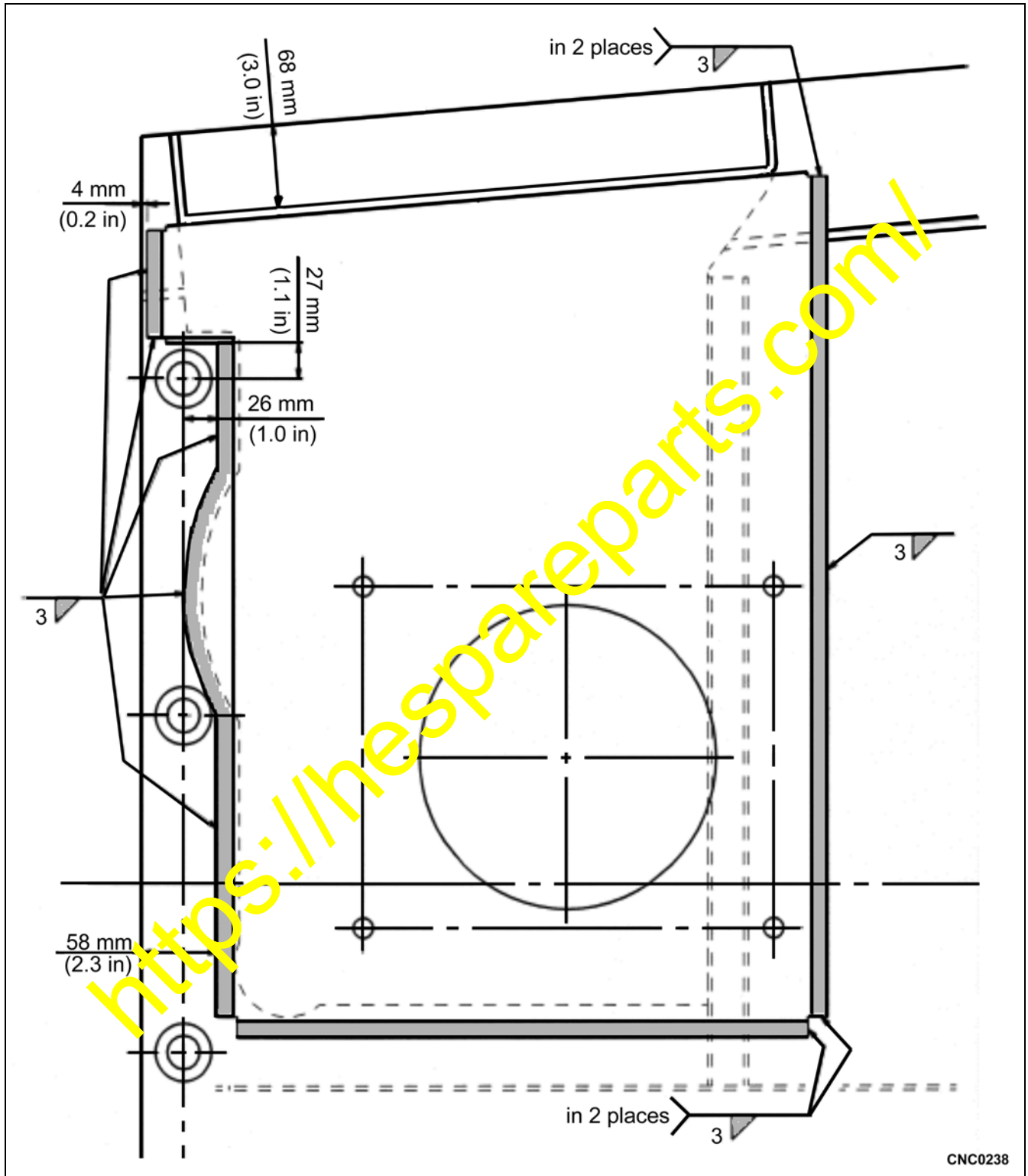




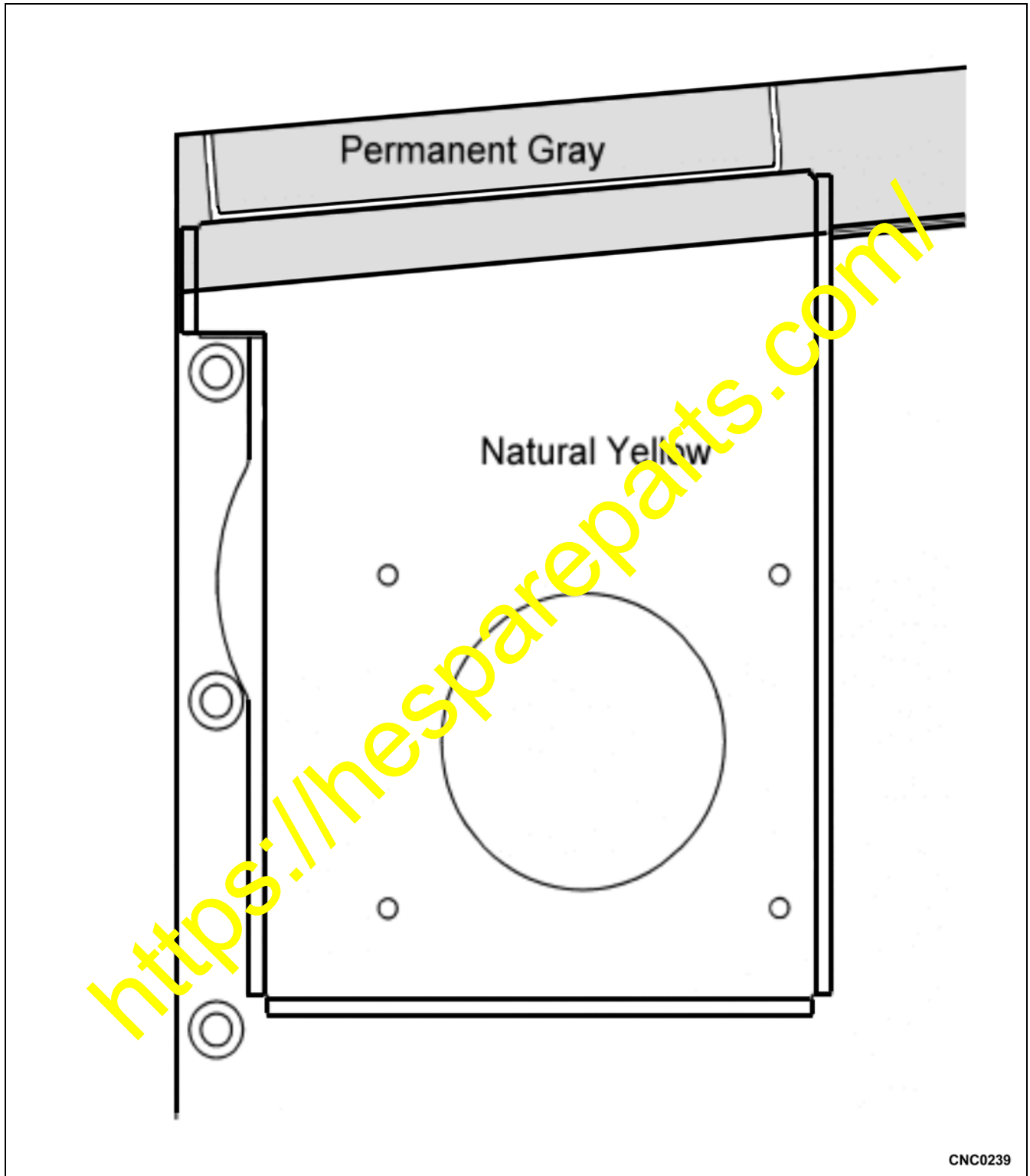
17. Cut an opening in the hood as shown in the rework drawing below. Be sure to remove any sharp edges after cutting the opening out.



18. After opening has been cut in hood section and cut lines de burred, weld the cover 425-54-A2360 in place as shown in the rework drawing below.



19. After welding and cleaning surfaces, repaint top side and bottom side of hood as shown in illustration below.



20. Reinstall hood assembly (8) and related components.
21. Reconnect air conditioner hose brackets, and instal exhaust stack (1). Connect lamp connector (3) and install radiator grille (2) and baffles.
22. Install air cleaner flex hose 6090-01-1340 or 07281-02196, support 425-01-23410 and bonnet 6090-02-4620. Check completed installation.

